

20030525.qrp v02_n931.qrl.20030525

Date: Sun, 25 May 2003 19:03:05 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2931

QRP-L Digest 2931

Topics covered in this issue include:

- 1) [151244] Last county in WV
by "w8diz" <w8diz@fpqrp.com>
- 2) [151245] Club
by "Rich Johnson" <rjohnson390@attbi.com>
- 3) [151246] Re: PA or antenna
by "Karl" <kkanalz@gcecis.com>
- 4) [151247] Re: Club
by "w8diz" <w8diz@fpqrp.com>
- 5) [151248] Re: PA or antenna
by "James R. Duffey" <JamesDuffey@comcast.net>
- 6) [151249] Wanted: Yaesu FT-50R
by "Paul Womble" <pwomble@verizon.net>
- 7) [151250] Part Needed ! ! !
by "Jim Kelley" <nw611j@hotmail.com>
- 8) [151251] 30 and bored ??
by "Jerry Ford" <benlightnd13@mchsi.com>
- 9) [151252] Re: PA or antenna
by "John J. McDonough" <wb8rcr@arrl.net>
- 10) [151253] Lots of Signals so I'm moving down
by "Jerry Ford" <benlightnd13@mchsi.com>
- 11) [151254] Clobbered Again
by "Jerry Ford" <benlightnd13@mchsi.com>
- 12) [151255] Re: LED voltage indicator
by "Lew Paceley" <lew@paceley.com>
- 13) [151256] Re: Suggestions for QRP carrying cases?
by mjfitz@uswest.net
- 14) [151257] Re: QRP-L digest 2930
by KC8WBK <cruisenewsnet@yahoo.com>
- 15) [151258] 10w into my +40 dbm IP3 receiver? (was Third Order Intercept)
by Dan Tayloe <dtayloe@cox.net>
- 16) [151259] Happy Dance - another KD1JV "AT Sprint" is alive and performing
BEAUTIFULLY
by "Sam Billingsley" <sambillingsley@earthlink.net>
- 17) [151260] For Sale = W9GR DSP filtre
by "Doc K0EVZ" <dock0evz@earthlink.net>
- 18) [151261] >IP3< es/vs >TOI<
by John R Kirby <n3aaz-qrp@juno.com>

- 19) [151262] Re: AT in PA on May 25
by "Ron Polityka" <wb3aal@fast.net>
- 20) [151263] Re: PA or antenna
by "John" <jdorson@worldshare.net>
- 21) [151264] Third Order Intercept
by "Karl F. Larsen" <k5di@zianet.com>
- 22) [151265] PL259 Source question
by "Nils R. Young" <nilsbull@juno.com>
- 23) [151266] FS QRP++ Index SSB/CW transceiver
by <n2go@arrl.net>
- 24) [151267] OT:Convert XTAL rig to Digital VFO?
by David Shalita <davidr@cnmnetwork.com>
- 25) [151268] Booth help needed for HamCon 2003 in Estes Park CO
by "Rod N0RC" <rod@n0rc.us>
- 26) [151269] Diz on 7044
by Garie Halstead <khyberpass65@yahoo.com>
- 27) [151270] WV falls all QRP
by Larry Cahoon <lejek@erols.com>
- 28) [151271] Re: 10w into my +40 dbm IP3 receiver
by "James R. Duffey" <JamesDuffey@comcast.net>
- 29) [151272] FS Teflon wire \$15 shipped
by <n2go@arrl.net>
- 30) [151273] 12m CW
by "sslyon" <sslyon@megalink.net>
- 31) [151274] "AT Sprint" Q1,Q2 transistor question
by "John A. Evans - N0HJ" <jae@codenet.net>
- 32) [151275] Fw: [multipigplus] Multipig vs K-1
by "Jerry Ford" <benlightnd13@mchsi.com>
- 33) [151276] Endorsement--Re: FS Teflon wire \$15 shipped
by mjfitz@uswest.net
- 34) [151277] Re: Third Order Intercept
by KD5NWA <KD5NWA@cbayona.com>
- 35) [151278] Re: 10w into my +40 dbm IP3 receiver
by Glen Reid <k5fx@arrl.net>
- 36) [151279] Re: Diz on 7044
by "KXBill" <w7kxb@cox.net>
- 37) [151280] Re: Third Order Intercept
by "Nick Kennedy" <nkennedy@tcainternet.com>
- 38) [151281] Re: Third Order Intercept
by "George, W5YR" <w5yr@att.net>
- 39) [151282] Re: Third Order Intercept
by "Nick Kennedy" <nkennedy@tcainternet.com>
- 40) [151283] Very neat cw key site
by <tlogan7@cox.net>
- 41) [151284] Fw: [fpqrp] Fw: [multipigplus] Multipig vs K-1
by "Jerry Ford" <benlightnd13@mchsi.com>
- 42) [151285] FS: Rockmite 40
by Rick McKee <kc8aon@juno.com>

- 43) [151286] Silent Key KK5YY
by "Karl F. Larsen" <k5di@zianet.com>
44) [151287] Weekly Rock-Mite-RTTY W.A.S. progress report...
by "Bill, N4QA" <n4qa@hotmail.com>
45) [151288] Anyone else QRP'n in the WPX test?
by john <johnmb@nc.rr.com>
46) [151289] Re: N0SXX from Colorado Trail Sat Nite
by Gary Slagel <gdslagel@yahoo.com>
47) [151290] Re: Anyone else QRP'n in the WPX test?
by Wayne Rogers <w5kdj@juno.com>
48) [151291] Data for understanding
by "Karl F. Larsen" <k5di@zianet.com>
49) [151292] Ok, I'm full and Ready to play
by "Jerry Ford" <benlightnd13@mchsi.com>

Date: Sat, 24 May 2003 19:13:46 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: "Larry Cahoon" <lejek@erols.com>
Cc: <qrp-1@Lehigh.EDU>, <fpqrp-1@fpqrp.com>
Subject: [151244] Last county in WV
Message-ID: <003501c3224a\$249c8e70\$b8cf1d41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Hi Gang,

Diz, W8DIZ here...

I have a schedule tomorrow with Larry, WD3P at NOON EDT.
Will be in WIRT COUNTY, WV, working QRP near 7044.
It's one of those RARE hard-to-get counties, so...

After I work Larry, I have a bit of time to help others
get the county. Will shut down at 1 PM EDT.

GOOD LUCK LARRY!

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39:13:05N 84:18:18W
RIG:multiPIG+ ANT:470 FT Horiz Loop <http://kitsandparts.com>

Date: Sat, 24 May 2003 16:48:02 -0700
From: "Rich Johnson" <rjohnson390@attbi.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [151245] Club
Message-ID: <003201c3224e\$ea8564f0\$5c96d00c@END0EB86CD98A1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I wish to learn code and would like contact information for a ham club in the Renton, WA area.
Any one on the list that could help please drop me a line.

cheers,
rich

Date: Sat, 24 May 2003 18:51:55 -0500
From: "Karl" <kkanalz@gcecispc.com>
To: <kf4yyd@adelphia.net>,
 "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [151246] Re: PA or antenna
Message-ID: <002801c3224f\$75c59670\$9e1a0ed0@HamShack>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi, Tom!

There's an old adage out there (at least it was when I was licensed in 1954) that: "A dollar in the antenna is worth TEN dollars in the transmitter".

I'd suggest you focus on your antenna and make it as efficient as you possibly can. I don't know what your real estate situation is like, but try to maximize your antenna(s) for your particular space capabilities!.

Karl K - W8TIF
McKinney, Texas

----- Original Message -----
From: "Tom" <kf4yyd@adelphia.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Saturday, May 24, 2003 2:53 PM
Subject: PA or antenna

> Hi all,
>
> OK now that I have all of two contacts under my belt I'm ready to start
> dreaming of phase two. My SW-40 is putting out around 2.5 watts to an
> inverted Vee up only twenty feet. Since this is my only HF station I was
> wondering how difficult WAS will be without some kind of upgrade. I've
> already proven to myself that QRP works and have decided this is where I
> want to stay. Originally I built the SW-40 to work in the Novice portion
of
> the band but then found out W1AW transmits in the General portion so I
> reworked the VFO to receive the code practice sessions (which is also the
> only reason I went ahead and upgraded to General as I wasn't going to keep
> redoing the torroid)
>
> That being said I consider myself to be a kind of novice squared and don't
> know how to proceed from here. Should I concentrate more on my antenna i.e
> improve it somehow or try and come up with a power amp that would allow me
> to get my signal up to 5 watts if it was needed. While the antenna is
> probably the best bet I don't have any experience or a lot of test
equipment
> such as an antenna analyzer so I think it might be difficult to optimize
it.
> On the other hand W1FB's Design Notebook has a CW power amp but it looks
> like I would need to drop the power out of the rig to 0.4 watts so it
would
> work as designed. I'm happy with what I have and don't plan I changing
> anything right now I just thinking about the future.
>
> de Tom kf4yyd
> Fredericksburg, VA
>
>
>
>

Date: Sat, 24 May 2003 19:57:03 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: <rjohnson390@attbi.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Cc: <fpqrp-1@fpqrp.com>
Subject: [151247] Re: Club
Message-ID: <004a01c32250\$2cf3f760\$b8cf1d41@cinci.rr.com>

MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Hi Rich,

There is a Flying Pigs Chapter that is about to startup in WA.
I'm copying the piggies with this email. Hope some of them will
contact you for membership and then you all can play/practice
CW on the west coast.

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39:13:05N 84:18:18W
RIG:multiPIG+ ANT:470 FT Horiz Loop <http://kitsandparts.com>

----- Original Message -----

From: "Rich Johnson" <rjohnson390@attbi.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Saturday, May 24, 2003 7:48 PM
Subject: Club

I wish to learn code and would like contact information for a ham club in
the Renton, WA area.
Any one on the list that could help please drop me a line.

cheers,
rich

Date: Sat, 24 May 2003 18:13:54 -0600
From: "James R. Duffey" <JamesDuffey@comcast.net>
To: kf4yyd@adelphia.net
Cc: QRP-L <qrp-l@lehigh.edu>
Subject: [151248] Re: PA or antenna
Message-ID: <BAF566E1.74A4%JamesDuffey@comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Tom - With only two QSOs under your belt, if I were you, I would enjoy your
first taste of ham radio for awhile longer before upgrading your shack. Get

a few more QSOs under your belt.

Having said that, you are better off improving your antenna first before getting an amp. Raise it up as much as you can.. With your antenna at 20 ft, raising your antenna even 10 ft higher will help a lot. On 40 M it is difficult for the typical ham to get his 40 M antenna too high. If you don't have a choke balun at the feed point, you should install one. If you are using small diameter feed line, such as RG58, replace it with RG-213. You can probably borrow an antenna analyzer from a local ham (check at a club meeting), but a simple SWR bridge will work fine to tune an antenna. You may wish to complement your inverted vee with a vertical for DX. If you do that, you will need to install a good ground system

After you have the antenna improved, you can consider the amp.

You might consider adding another band to your shack to increase your operating pleasure. 20 M is a good complement to 40 M if you like DX. I personally like 30 M. With the new bands you may wish to use balanced feeders on the inverted vee and get a balanced tuner like the Z-match for multiband use..

Happy hamming. Let us know what you do, and I hope that we can meet on the bands some day. - Dr, Megacycle KK6MC/5

James R. Duffey KK6MC/5
Cedar Crest NM 87009 DM65

Date: Sat, 24 May 2003 20:50:45 -0400
From: "Paul Womble" <pwomble@verizon.net>
To: <qrp-l@Lehigh.EDU>
Subject: [151249] Wanted: Yaesu FT-50R
Message-ID: <000501c32257\$afae9820\$6401a8c0@house>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Looking for an FT-50r handheld in good condition.

Let me know what you have.

Thanks!

Paul K4FB

Date: Sat, 24 May 2003 21:18:57 -0400
From: "Jim Kelley" <nw611j@hotmail.com>
To: qrp-1@lehigh.edu
Subject: [151250] Part Needed ! ! !
Message-ID: <Law15-F8TCi90gP8yJr000121cc@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Now if I can just keep my finger off the tab key.

Group: I am in need of a switch, A rotary switch. The switch is a

"CENTRALAB PART NUMBER 1460, A 1 - POL, 2 - POSITION SHORTING
ROTARY SWITCH."

"A CENTRALAB 1409 WILL ALSO WORK."

If someone has one in serviceable condition please contact me DIRECT.

Information to where one can be found appreciated. Thank you

73

Jim K4YBB

Protect your PC - get McAfee.com VirusScan Online
<http://clinic.mcafee.com/clinic/ibuy/campaign.asp?cid=3963>

Date: Sat, 24 May 2003 21:13:14 -0500
From: "Jerry Ford" <benlightnd13@mchsi.com>
To: "qrp-1" <qrp-1@lehigh.edu>, "FPigs" <fpqrp-1@mpna.com>
Subject: [151251] 30 and bored ??
Message-ID: <004a01c32263\$33870820\$f374da0c@mchsi.com>

Hey you's ladies and gentlemen. Anybody sitting around bored and wondering what to do for some intertainment?

Why don't you jump over on 30 mtrs (10.121) and say howdy. While your at it, bring along one of those FP numbers that are being so hard to find.

Any of you piggies looken for somethen to do??

What say ye ??

72 oo Jerry N0JRN
FP # 546, ARS # 923, ARCI # 11049, ARRL,
Springfield, Mo. <http://home.mchsi.com/~n0jrn/>
MP + # 8, K 1 # 608, SW 20 +, TT 1340 , RM 20 &
40, Tiny Tornado 20, 30, 40, 80, SMK - 1
and so on and so on

Date: Sat, 24 May 2003 22:21:16 -0400
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Cc: <kf4yyd@adelphia.net>
Subject: [151252] Re: PA or antenna
Message-ID: <032f01c32264\$53c68920\$010044c0@chartermi.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Tom

I'm late to the thread here, but I'm going to repeat what others have said, only with more words <g>.

First off, it's pretty hard to tell 5 watts from 2.5. I know, doubling the power sounds like a lot, but in fact, the guy on the other end will have to look hard to see his S meter change.

The antenna is a much more productive area, although I'm personally not a believer that you need a 6 element beam at 100' to do any good. An inverted vee is a fine antenna.

You don't need a ton of equipment to do a lot of antenna work. For around \$30 you can get an SWR meter at the local Radio Shack, a little less money for a better one at a swap. Down there in VA you have enough people that maybe there's even a ham store not too far away. An antenna analyzer is a great convenience, but in no way needed.

If the SWR meter is too rich for your blood, you can make a simple resistive bridge that is good enough for most of what you want to do. It's a little less convenient, but you don't need space shuttle accuracy here.

20 feet is a bit close to the ground for 40, though. If you can do anything to get it higher, then do. If not, you might consider a vertical, depending on the sort of ground you have. A low dipole will tend to radiate straight up. This will be good for close in states, but will be a problem for the left coast. A vertical will radiate very low, so it does tend to make close in states a bit of a problem, but it lets you reach out and grab those left coasters.

It's pretty easy to experiment with antennas. And it's kind of fun, too. If you're a computer geek type, you can download NEC2 and model antennas before you construct them. The EZNEC program is about a zillion times more convenient, but it costs. There may be a freeware version out there, I'm not sure. NEC2 is pretty much unlimited in what you can model, but it's quite a pain to use.

The other thing to do is to study propagation, especially if you are going to try WAS on 40 alone. Understanding what to expect can make your on-air time a lot more productive.

Someone mentioned adding 20 to your station's repertoire, and that would be quite a good thing. As you move into summer, 40 is going to get quite noisy. That's when 20 is coming into it's own. Also, you will find that stations beyond about 1000 miles will be a bit of a challenge on 40. It's quite possible, but you will need good conditions. As the summer settles in, those farther out stations will be a piece of cake on 20.

OK, so I run off at the mouth (fingers?) a bit. Hope that helps.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Tom" <kf4yyd@adelphia.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Saturday, May 24, 2003 3:53 PM
Subject: PA or antenna

> Hi all,

Date: Sat, 24 May 2003 22:08:14 -0500
From: "Jerry Ford" <benlightnd13@mchsi.com>
To: "qrp-l" <qrp-l@lehigh.edu>, "FPigs" <fpqrp-l@mpna.com>
Subject: [151253] Lots of Signals so I'm moving down

Message-ID: <006401c3226a\$e27fa600\$f374da0c@mchsi.com>

Jim: I'm moving down some to get away from the QRM. Maybe we will do better. I'm listening on 10.115 and calling CQ

Anyone want to join in??

72 Jerry
FP # 546, ARS # 923, ARCI # 11049, ARRL,
Springfield, Mo. <http://home.mchsi.com/~n0jrn/>
MP + # 8, K 1 # 608, SW 20 +, TT 1340, RM 20 &
40, Tiny Tornado 20, 30, 40, 80, SMK - 1
and so on and so on

Date: Sat, 24 May 2003 22:17:52 -0500
From: "Jerry Ford" <benlightnd13@mchsi.com>
To: "qrp-1" <qrp-1@lehigh.edu>, "FPigs" <fpqrp-1@mpna.com>
Subject: [151254] Clobbered Again
Message-ID: <006a01c3226c\$3ab5a120\$f374da0c@mchsi.com>

Well, it seems QRP has no chance on 30 mtrs.
I got clobbered again by the QRO gang. And they just keep coming.
Hee Hee
Seems I'm going to have to wait for them to go to bed.
Thought I would move down a bit but that isn't doing any good either.
So, I'll go back to 10.121 and wait for it to open up again.

Jim (K4YBB) and others. Thanks for trying !!
Hopefully we'll get a shot here in a bit !! If you check
10.121 and it's clear on your end, give me a shout. I'll be there
listening.

72 oo to the gang:

Jerry N0JRN
FP # 546, ARS # 923, ARCI # 11049, ARRL,
Springfield, Mo. <http://home.mchsi.com/~n0jrn/>
MP + # 8, K 1 # 608, SW 20 +, TT 1340, RM 20 &
40, Tiny Tornado 20, 30, 40, 80, SMK - 1
and so on and so on

Date: Sat, 24 May 2003 22:56:23 -0500
From: "Lew Paceley" <lew@paceley.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Cc: <wa3rey@comcast.net>
Subject: [151255] Re: LED voltage indicator
Message-ID: <000301c32271\$9ce359a0\$6501a8c0@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Hi Tom,
Steve, KD1JV, has a nice little battery monitoring circuit on his web site using an LM358, though most any similiar op amp would do fine as a DC voltage comparator.

Steve's circuit can be found here:
<http://www.qsl.net/kd1jv/batmon.HTM>

GL es have fun.

72/73,
Lew
N5ZE

Date: Sat, 24 May 2003 23:26:11 -0500
From: mjfitz@uswest.net
To: qrp-1@Lehigh.EDU
Subject: [151256] Re: Suggestions for QRP carrying cases?
Message-ID: <3ED045E3.2C7F27A3@uswest.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I use a plastic transparent tub (like Tupperware) from the discount house (about two/three bucks) with plastic bubblewrap for cushioning to carry radio gear much of the time...total cost...the two bucks. Think the kind I like is called Sterilite or something similar. You can't drive over it, but the top does snap on and it is very light weight and reasonable sturdy. Rubbermaid also makes some, among others. Go to a larger discount house like Wallyworld or Kmart and look around. There is a variety of shapes and

sizes.

Mike NOMF

Date: Sat, 24 May 2003 21:27:24 -0700 (PDT)
From: KC8WBK <cruisenewsnet@yahoo.com>
To: qrp-l@Lehigh.EDU
Subject: [151257] Re: QRP-L digest 2930
Message-ID: <20030525042724.82559.qmail@web20909.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Tom, I'm just a couple of months ahead of you (started out with the SW+ 40m in March). I would suggest that you get the antenna feedline (coax) as high in the air as you can. I started out with a dipole hung horizontally about 15 feet up, then I tried to hang the dipole vertically, with the coax to radiator connection at about 25 feet up and the ground side angled off to the side. A few days ago I switched over to an inverted vee with the feedline/radiator point up about 50 feet. I am hearing a lot more and I think I am getting out better too.

Also, you will want to increase your code speed. Keep working on it, a lot of the code is lightning fast, well, above 10 wpm anyway. If you can copy 20 wpm, you will be able to reply to a lot more CQ's. I'm using MorseCat software, and its a struggle but practice makes perfect.

There are some mods for the SW+ which allow you to increase the width of the band and use a 10 turn pot, or you can add a switch and capacitor and get two "bands". I have the two band mod and find it very useful to be able to go from the 7040 band to the Novice band (7120) where they are more tolerant of slow code.

From: "Tom" <kf4yyd@adelphia.net>
Subject: [151236] PA or antenna

Hi all,

OK now that I have all of two contacts under my belt
I'm ready to start
dreaming of phase two. My SW-40 is putting out around
2.5 watts to an
inverted Vee up only twenty feet. Since this is my
only HF station I
was
wondering how difficult WAS will be without some kind
of upgrade. I've

=====

KC8WBK

<http://www.qsl.net/kc8wbk>

Do you Yahoo!?

The New Yahoo! Search - Faster. Easier. Bingo.

<http://search.yahoo.com>

Date: Sat, 24 May 2003 21:30:04 -0700

From: Dan Tayloe <dtayloe@cox.net>

To: qrp-1@Lehigh.EDU

Subject: [151258] 10w into my +40 dbm IP3 receiver? (was Third Order Intercept)

Message-ID: <3ED046CC.6748723A@cox.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

IP3 of +40 dbm means that I can feed 10w (+40 dbm) into the front end of
my receiver and all is ok, right?

Hardly!

I personally do not like the use of IP3 in receiver measurements because
most folks do not understand what it means. Everyone agrees that bigger
is better, but that is where the general understanding seems to stop.

IP3 of +40 dbm refers to a mythical, mathematical, theoretical crossing
point that does not occur in real life in receivers.

The way I normally measure IP3 is to inject two equal signals into a
test receiver front end. The typical spacing is 20 KHz, with the
receiver tuned either 20 KHz below the lowest signal, or 20 KHz above
the highest signal. The two generators are then increased in strength
until a "birdie" appears that is 3 db stronger than the receiver noise.

The equation I use to calculate IP3 is $1.5 \times (A - B) + B$ where A is the test signal level (in dbm), and B is the level of the spur (in dbm), adjusted to 3 db above the receiver noise floor.

So what kind of signal levels does it take to create spurs in a receiver with an IP3 of +40 dbm?

10W? 1W, 100mW?

Assume for the sake of illustration this receiver has a 500 Hz sensitivity somewhere on the order of -136 dbm. From the above equation, it takes signal levels of about -19 dbm (about 0.012 mW) to start to cause spurs to show up in the receiver at 3 db over the noise floor. 0.01 mW (0.00001W) is a long way from 10W!

This however is not the entire story since the lower HF bands are too noisy to make use of -136 dbm sensitivity. I have been told that 40m is rarely quieter than -116 dbm, which is 20 db more noisy than the receiver floor of -136 dbm. Since the IP3 spurs grow 3db for every 1 db the generator levels are raised, it will take signals of $(-19 + 20/3)$ or -12 dbm (0.06 mW) to cause IP3 spurs to be heard above the noise on 40m. Again, 0.06 mW is a long way from 10W.

As the input signal is increased, this ideal 3:1 spur growth for every db of increased signal level causes the rapidly increasing spur level to eventually catch up mathematically with the input signal at the IP3 level of +40 dbm. Of course a real receiver front end would have burned up before then, so the +40 dbm quoted IP3 level is strictly a mathematical concept.

If I had my way, in addition to quoting the receiver sensitivity and the third order intercept of the receiver (IP3), it would be nice to standardize on some meaningful IP3 spur level such as -110 or -120 dbm and quote the signal levels required to create this level of IP3 spur to be heard in the receiver under test. If this were provided, I think folks would have a much better understanding of exactly what it is they are or are not getting with a specific IP3.

Just for comparisons sake, here are a few IP3 levels, and the signals that will cause spurs to occur if the receiver is sensitive to -136 dbm:

IP3	Spur causing signal Level
+60 dbm	-5 dbm/0.3 mW
+40 dbm	-19 dbm/0.012 mW (FT-MP1000 range?)
+30 dbm	-25 dbm/0.003 mW
+20 dbm	-32 dbm/0.0006 mW (K2 range?)
+10 dbm	-38 dbm/0.00016 mW

+0 dbm -45 dbm/0.00003 mW (a good NE602?)
-10 dbm -51 dbm/0.000008 mW (more typical NE602?)

I guess that does not make the typical 602 rig look very good.

The bus switch ICs that I have been playing with in my direct conversion radios have been also been used as the first mixer in other folks +40 dbm superhet designs. These are devices capable of passing rf voltages of 3 to 5v pk-pk, or 22 to 62 mW (+13.5 to +18 dbm) max.

These devices do really well passing the relatively tiny -12 dbm signals (0.06 mW, about 0.15v pk to pk) that cause receiver spur problems, but do not work so well with 65v pk-pk, 10w signals. As you would expect, 10w directly into the front end of a +40dbm IP3 receiver would probably require a trip to the bench (or the factory) for repair.

- Dan, N7VE

Date: Sun, 25 May 2003 00:38:12 -0400
From: "Sam Billingsley" <sambillingsley@earthlink.net>
To: <qrp-l@lehigh.edu>, <ATRAIL@yahoogroups.com>,
 "_NOGA-TECH-LIST" <nogatech@topica.com>, <nogaqrp@mailman.qth.net>
Subject: [151259] Happy Dance - another KD1JV "AT Sprint" is alive and performing BEAUTIFULLY
Message-ID: <002701c32277\$73e27760\$992dfea9@BIGBOX>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

For those of you that are building one of Steve's limited production kits, the AT Sprint, keep at it cuz it's more than worth the effort.

For those of you that missed out on the opportuntiy hopefully someone or group will take up the production challenge and offer more of these.

Wow.....it's difficult to imagine a three band 40/30/20 meter 5 watt DDS VFO device running in an ALTOIDS box....running cool..... and weighting almost nothing (lookout ARS Spartan Sprint contest). Excellent front sensitivity and xtal filter selectively.

The Class E 3 X 2N7000 FET (in parallel) final runs cools to the touch at @ 5W 12.5v @ ~630 mA and about 55 mA on Rx. Amazing design.

A shirt pocket rig that I've wanted for hiking and backpacking for years and

my feeble attempts are laughable compared to Steve Webber's (KD1JV) neat design and layout.

Monty N4ESE has his comments on building, mods and many pictures for you to see at <http://www.dit-dididit-dit.com/> . Just go down to MOnTy's link on the AT Sprint and enjoy.

Thanks Monty and Steve for coming up with a couple of MODs to improve things. I got them just in time for my construction effort.

This kit is not for newbeees at kit building there are some very tiny close spaced surface mount chips and many cap, inductor and resistor SMT components that make a microscope and steady hand a necessity. Even with my homebrewing experience (but no SMT experience) I got professional help from Bob Confrey WA1EDJ, a friend and member of NOGA QRP club here in Atlanta. I must add that the few problems I had to trouble shoot were caused by me and not Bob. Thanks Bob.

Tonight I got the 20 meter module finished and the motherboard and 20 mtr module debugged. (YES I had bugs in both). Took it to my operating location (sans ALTOID box) and plugged it into the antenna coax switch and caught the end of the QRP contest going on.

Thanks to AC7LX @ 0329UTC 14.063MHz I got a good QS0 exchange and logged my first At Sprint contact. I am really looking to build up the other band (40/30) modules this weekend and will be taking it to St. Simons Island, GA the following weekend. So lookout for me on one of the three bands.

Here's my setup for the initial contact:
<http://www.qsl.net/ae4gx/ATSprintfirstqso.jpg>

I'll be putting up a more detailed write-up on my web page in a day or two if I can tear myself away from playing with it. :-)

Sam Billingsley AE4GX
North Georgia QRP Club
Atlanta, GA

Date: Sat, 24 May 2003 23:58:55 -0500
From: "Doc K0EVZ" <dock0evz@earthlink.net>
To: "qrp-l reflector" <qrp-l@lehigh.edu>,
"Elecraft " <elecraft@mailman.qth.net>
Cc: "doc k0evz earthlink" <dock0evz@earthlink.net>
Subject: [151260] For Sale = W9GR DSP filtre

Message-ID: <412003502545855721@earthlink.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Gang:

The first buyer apparently backed out of the deal, so the W9GR DSP is available again. Here is my original posting, again:

For Sale = W9GR DSP filtre. This is the original version, works very well. Runs off 12 VDC. Ten selectable modes. Offers de-noiser, signal peak, signal notch, HF Packet/RTTY, and a range of CW filtres down to 30 Hz width (sic).
Unit is in excellent condition electronically.
Price only \$55.00 plus shipping and documentation to your CONUS address.

73,
--Doc/K0EVZ

Date: Sun, 25 May 2003 06:57:03 -0400
From: John R Kirby <n3aaz-qrp@juno.com>
To: qrp-l@Lehigh.EDU
Subject: [151261] >IP3< es/vs >TOI<
Message-ID: <20030525.065809.-308923.0.n3aaz-qrp@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

>>From: Dan Tayloe <dtayloe@cox.net>
>>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>>Date: Sat, 24 May 2003 21:30:04 -0700
>>Subject: 10w into my +40 dbm IP3 receiver? (was Third Order Intercept)

A big BIG BIGBIG !!! THANKYOU !!! to Dan (N7VE).

I suggest the post above (Dan's) printed on the front of all QSL cards .

. .

Thanks again Dan,
John
N3AAZ
00TC
FM 19 xa

The best thing to hit the internet in years - Juno SpeedBand!
Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sun, 25 May 2003 07:16:37 -0400
From: "Ron Polityka" <wb3aal@fast.net>
To: ". QRP-L" <qrp-l@lehigh.edu>
Subject: [151262] Re: AT in PA on May 25
Message-ID: <00e601c322af\$1eac10c0\$b0e35cd1@wb3aal>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Postponed.

Raining hard and the radar does not look good for a 11:00 UTC start.

I will try tomorrow morning when I have more time.

72 & Good DX
Ron de WB3AAL
wb3aal@fast.net
www.n3epa.org

----- Original Message -----

From: "Ron Polityka" <wb3aal@fast.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Saturday, May 24, 2003 6:57 PM
Subject: AT in PA on May 25

> Hello,
>

> The weather looks like it will be fair tomorrow morning, so I plan to get out
> on the Appalachian Trail and make my May QSO's. Hopefully the rain decides to
> take a break on Sunday.

>
> Time: Look for me between 11:00 & 12:00 UTC
> Freq: 10.106 to 10.116 MHz
> Location: North of Route 183 in PA
> Rig: K1 @ 5 watts and dipole

>
> 72 & Good DX
> Ron de WB3AAL
> wb3aal@fast.net
> www.n3epa.org

>
>
>
>

Date: Sun, 25 May 2003 08:06:25 -0400
From: "John" <jdorson@worldshare.net>
To: <kf4yyd@adelphia.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [151263] Re: PA or antenna
Message-ID: <006a01c322b6\$14d0db10\$85958b41@ATHOME>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Forget the extra power,,,go for the ant. improvement.

John K2JHU...

----- Original Message -----

From: "Tom" <kf4yyd@adelphia.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Saturday, May 24, 2003 3:53 PM
Subject: PA or antenna

> Hi all,
>

> OK now that I have all of two contacts under my belt I'm ready to start
> dreaming of phase two. My SW-40 is putting out around 2.5 watts to an
> inverted Vee up only twenty feet. Since this is my only HF station I was
> wondering how difficult WAS will be without some kind of upgrade. I've
> already proven to myself that QRP works and have decided this is where I
> want to stay. Originally I built the SW-40 to work in the Novice portion
of
> the band but then found out W1AW transmits in the General portion so I
> reworked the VFO to receive the code practice sessions (which is also the
> only reason I went ahead and upraded to General as I wasn't going to keep
> redoing the torroid)
>
> That being said I consider myself to be a kind of novice squared and don't
> know how to proceed from here. Should I concentrate more on my antenna i.e
> improve it somehow or try and come up with a power amp that would allow me
> to get my signal up to 5 watts if it was needed. While the antenna is
> probably the best bet I don't have any experience or a lot of test
equipment
> such as an antenna analyzer so I think it might be difficult to optimize
it.
> On the other hand W1FB's Design Notebook has a CW power amp but it looks
> like I would need to drop the power out of the rig to 0.4 watts so it
would
> work as designed. I'm happy with what I have and don't plan I changing
> anything right now I just thinking about the future.
>
> de Tom kf4yyd
> Fredericksburg, VA
>
>

Date: Sun, 25 May 2003 06:31:15 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: qrp-l@lehigh.edu
Subject: [151264] Third Order Intercept
Message-ID: <Pine.LNX.4.44.0305250548470.11315-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The subject measurement called TOI for short, is a drawing that shows when the amplitude of the intermod signals is exactly equal to the desired signal. In my 1996 ARRL Handbook it is figure 17.7 and is in the chapter Receivers, Transmitters, Transceivers and Projects.

The TOI uses the fact that you can measure the level of the desired and intermod signals and that the desired signal raises with a slope of 1 while the intermod signal raises with a slope of 3.

So the only actual measurement is the spectrum display made of the test receivers audio output. Now it's well known how to do this measurement but it's not easy to do.

And the test receiver must be fed 2 equal signals separated in frequency by just a few hundred cycles.

Why do this measurement? Because with a single number you can tell how good a receiver will perform on a busy Ham band. Actual numbers that have been measured by ARRL show the Yaesu FT-817 with TOI= about +5 DB is typical of all the small radios where size and cost are important. Other similar radios are the Yaesu FT-897 and the Icom 706.

Now the Yaesu FT-1000 is an expensive radio and TOI= about +20 DB and listening to this receiver is a pleasure. The bands are not as crowded, and nearby strong stations are not a problem. Stations you can just hear on a FT-817 are loud and clear on the FT-1000.

I wonder how the band will sound with the new Icom receiver that has TOI= +40 DB? They must achieve this amazing number with Digital Signal Processing. You can make a nearly perfect filter and amplifier with DSP.

--

- Karl Larsen k5di Las Cruces, NM Az ScQRPions -

Date: Sun, 25 May 2003 08:46:46 -0400
From: "Nils R. Young" <nilsbull@juno.com>
To: QRP-L@lehigh.edu
Subject: [151265] PL259 Source question
Message-ID: <20030525.085126.-282137.1.nilsbull@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Y'all,

Part of my "gettin' ready to go to the beach" program is putting together different cables for all the stuff what goes in the carryin' case.

I'm looking for a source for the crimp-on PL259 connectors that go on RG59 or RG8X.

I've been using Kings connector KU59-08, but there ain't no more in my junk box & as far as I can tell, Kings doesn't even make 'em any more. The PL259 connectors I bought from Debco (I think, but ain't sure) at Dayton are good enough, but the plastic insulation pieces pop out too easy when I'm inserting the cable. That & there's a very, very small tolerance of space between the center conductor & the metal shell of the connector.

I got some PL259 crimp on from Roger that were set for RG58, but I'm trying to use larger/better cable for the mobile/beach set up.

And yes, I know that crimp-ons are not as good as the solder-in PL259s with the appropriate center adaptor, but I have to use too much heat to slobber in the shell & the adapter that I end up melting the dielectric/insulation in the cable. And it's one more dagnab thing to go wrong . . . like the plastic insulators popping out of the crimp-on connector in the first place.

Any hints from youse?

73

Nils

Nils R. Bull Young -- W8IJN -- La Estancia de los Guajolotes Sonrientes
-- <http://w8ijn.tripod.com> -- <http://members.fortunecity.com/nilsbull>

--
"The island is closer than your memories are." -- Ian G. Bull Young, 15 Feb 2002

The best thing to hit the internet in years - Juno SpeedBand!
Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sun, 25 May 2003 08:54:58 -0400 (EDT)
From: <n2go@arrl.net>
To: <qrp-1@Lehigh.EDU>

Subject: [151266] FS QRP++ Index SSB/CW transceiver
Message-ID: <Pine.LNX.4.33.0305250849250.11649-1000000@valhalla.v>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I am selling my INDEX labs QRP++ transceiver. This is the last production run model. It has the VOGAD speech processor and the Special heavy duty> mixer. It also has the latest firmware from the factory. For those not familiar The New QRP ++ features:

The QRP PLUS is a compact low power transceiver with the features and performance you expect in a modern full size transceiver.

- strong, wide dynamic range receiver
- RF speech processor
- All band operation 160M through 10M
- General coverage receiver 1.8 MHz to 29.7 MHz
- 20 memories can be Set to any frequency in the operating range
- Provision for efficient Split operation
- High performance SCAF digital filters variable from 100hz to 2400hz
- Single Sideband and Full Break in CW operation
- Built in Iambic Keyer
- Very low power consumption on Receive

-It has an LCD display, switchable attenuator and tilt stand. Short learning curve to operate the radio. Original manual is included. I have used this rig to work Europe and Japan and South America on Forty meters...This is not a toy rig :) It would be great for portable or field day use. I don't do either.

It runs on 12 to 13.8VDC and requires a supply or battery that can supply 1.5A or more. A 4A or greater gel cell would be a good supply and should get you through a weekend.

\$325 shipped in US (please no food stamps or trades :))

73,

Jim n2go

Date: Sun, 25 May 2003 06:40:14 -0700
From: David Shalita <davidr@cnmnetwork.com>
To: "qrp-1" <"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>,>

David Shalita <davidr@cnmnetwork.com>
Subject: [151267] OT:Convert XTAL rig to Digital VFO?
Message-ID: <3ED0C7BE.601419EE@cnmnetwork.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I'm reactivating 2M packet radio gear at my QTH.

I have 3 old 2M transceivers and an older Radio Shack 10 channel scanner for this task but all are crystal controlled.

Buying quartz crystal pairs is not feasible when gear is still experimental.

I wonder if a Digital VFO can be used and injected into these radios and scanner to function like the quartz crystals for frequency control?

Anyone tried this? Was it successful?
I prefer to homebrew but will consider buying ready built.

Many thanks, 73, W6MIK, Dave

Date: Sun, 25 May 2003 09:13:43 -0600
From: "Rod N0RC" <rod@n0rc.us>
To: <elecrafter@mailman.qth.net>, "qrp-1" <qrp-1@Lehigh.EDU>, "cqcl-1" <CQCLIST@yahoo.com>
Subject: [151268] Booth help needed for HamCon 2003 in Estes Park CO
Message-ID: <00f601c322d0\$3be744e0\$6501a8c0@greyrock>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks,

I still need a few more volunteers to help with Hamcon Colorado, next weekend. (If you contacted me earlier, please do so again to confirm that you can still help)

Can you help? Hope so. It's a great way to spread the word about Elecraft; show off your handy work; and receive a nice thank you gift from Elecraft (a shirt, see Eric's message below).

Here is the exhibitor schedule:

FRI May 30, 1p - 6p
SAT May 31, 9a - 6p
SUN Jun 01, 9a - 11:45a

Please drop me an email with Your name, callsign, and some different 2-4 hour time slots that you can help with. I'll then come up with a schedule so that we can always have enough people in the booth--If you have ever seen the Elecraft booth at show like Hamcon, you know we'll need plenty of people. :-) There is always a crowd of folks who want to learn more about Elecraft radios, and the people who built them.

This will be a fun time, hope to hear from you soon....

73, Rod N0RC

----- Original Message -----

From: "Eric Swartz WA6HHQ - Elecraft" <eric@elecraft.com>

To: <elecraft@mailman.qth.net>

Sent: Monday, April 21, 2003 4:38 PM

Subject: [Elecraft] Booth help needed for HamCon 2003 in Estes Park CO
May 30 - June 1

> The HamCon 2003 hamfest (ARRL Rocky Mtn. Div. Convention) is
> coming up soon in Estes Park CO May 30 - June 1, 2003. Both
> Wayne and I will be busy that weekend but we would like to
> sponsor an Elecraft booth.
>
> We are looking for a few Elecraft enthusiasts to organize and
> work at the booth showing off their K1's and K2's. Here's your
> chance at fame and notoriety! Plus its a great way to meet other
> enthusiastic Elecraft builders and prospective builders. We
> provide all the needed flyers and Elecraft banners. Plus you
> will get a nifty Elecraft shirt with your call embroidered on
> it. Ask those who have participated before, its a blast :)
>
> If you are interested, please contact Lisa at lisa@elecraft.com .
>
> The Hamcon web site is: <http://www.hamconcolorado.org/>
>
> 73, Eric WA6HHQ
> -----

Elecraft mailing list: Elecraft@mailman.qth.net
You must be a list member to post to the list.
Postings must be plain text (no HTML or attachments).
See: <http://mailman.qth.net/mailman/listinfo/elecraft>
Elecraft Web Page: <http://www.elecraft.com>

Date: Sun, 25 May 2003 09:24:22 -0700 (PDT)
From: Garie Halstead <khyberpass65@yahoo.com>
To: Low Power radio discussion <qrp-l@Lehigh.EDU>
Subject: [151269] Diz on 7044
Message-ID: <20030525162422.22408.qmail@web80507.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Just worked W8DIZ operating from Wirt County WV today on the Little Kanawha River with an inverted vee. Good signal but only a couple of counties from me. HI You might wanna say hello to him before he leaves.

72 //Gary -K8KFJ-

Do you Yahoo!?
The New Yahoo! Search - Faster. Easier. Bingo.
<http://search.yahoo.com>

Date: Sun, 25 May 2003 16:42:34 +0000
From: Larry Cahoon <lejek@erols.com>
To: qrp-l@lehigh.edu
Subject: [151270] WV falls all QRP
Message-ID: <5.1.0.14.0.20030525163144.00bc3330@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Thanks to Diz, W8DIZ, WV is now done all QRP. He drove out from his home in OH about 180 miles to WV to give me the last one and do a with of sightseeing with his wife. Our sked worked perfectly. We had a back up cell phone number, that we were not even sure would have worked where he was headed. But we didn't need it. So just before noon today we put Wirt,

WV in the log. I very much appreciate the help and the effort he went to. That is part of what makes ham radio so much fun. WV came in with an average power of 1.4 watts.

Now only 20 counties in 8 states to go. Anyone driving around KY, NE, ND, ID, MT, UT, CO, or NV that wants to help out just let me know. Some are off the beaten path, but many are not too far from the interstates, and the two I need in NV are on I-80.

Tnx and 73 de Larry.....WD3P
<http://www.wd3p.net/>

Date: Sun, 25 May 2003 11:10:45 -0600
From: "James R. Duffey" <JamesDuffey@comcast.net>
To: dtayloe@cox.net
Cc: QRP-L <qrp-l@lehigh.edu>
Subject: [151271] Re: 10w into my +40 dbm IP3 receiver
Message-ID: <BAF65534.7516%JamesDuffey@comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Dan - Excellent post.

Judging a rig by its strong signal handling capability is fine, but one should recognize that this is predominantly useful in crowded band conditions or with nearby strong signals. Contests, pile ups, and field day operations all stress receivers and strong signal handling capability is paramount. But for casual operating, rigs with poor strong signal handling capabilities are acceptable. Witness the immense popularity of those 602 based rigs.

Operating rigs with both good and poor strong signal handling capabilities under the same conditions is enlightening though. At the Duke City Hamfest last August, We operated a K-2 and K-1 within 50 ft of the hamfest stations, an Icom Pro2 running 100 watts. The K-2 could operate within a couple of kHz of the hamfest station with no apparent artifacts, the K-1 had problems 30 kHz away, even with the attenuator kicked in full.

Having said all that, I think that the efforts of most rig designers today would be better put to use reducing the wide band noise introduced in the IF and AF stages, as well as reducing the distortion introduced in the over driven audio stages of many rigs. Just my \$0.02 worth. - Dr. Megacycle
KK6MC/5

James R. Duffey KK6MC/5
Cedar Crest NM 87009 DM65

Date: Sun, 25 May 2003 13:24:05 -0400 (EDT)
From: <n2go@arrl.net>
To: <qrp-l@Lehigh.EDU>
Subject: [151272] FS Teflon wire \$15 shipped
Message-ID: <Pine.LNX.4.33.0305251318110.16819-100000@valhalla.v>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I wasn't able to go to Dayton this year. I have some "extra" wire.
Get some in time for Field day or summer portable antennas.

Your choice of five -50' rolls of 22AWG (250' total)

or one roll of either 22AWG or 24AWG (250' total)

The wire is teflon insulated, silver plated, stranded wire.
Shipping is via priority mail and is "included" for the \$15 dollar price.

Paypal is ok.

I have to start saving for the new Icom :))

73,

Jim n2go

Date: Sun, 25 May 2003 14:02:09 -0400
From: "sslyon" <sslyon@megalink.net>
To: "qrp list" <qrp-l@lehigh.edu>, "NEQRP LIST" <neqrp@jona1.net>
Subject: [151273] 12m CW
Message-ID: <000701c322e7\$c2ccd760\$0ac8e742@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone want to try 12m CW? I've got my keyer on "Beacon" mode and listening on 24.906. Band sound really dead except for the IARU beacons on .930, but will hang in there until 1830Z or so.

73

aa1my

Seabury & Sharon Lyon
99 Sparrowhawk Mtn Rd
Bethel ME, 04217 U.S.A.
207-836-2576

Virus Protection by Norton and ZoneAlarm

Date: Sun, 25 May 2003 12:19:51 -0600
From: "John A. Evans - N0HJ" <jaevans@codenet.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [151274] "AT Sprint" Q1,Q2 transistor question
Message-ID: <3ED10947.B8C83F8D@codenet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greetings,

I am deep in assembly and am noticing that Q1, Q2 are supplied as 2N3819's but the schematic, parts list, and instructions list them as 2N3918's. Is this just a "Steve'ism" or is there a real problem here?

tnx es 72 - john - n0hj

Date: Sun, 25 May 2003 13:19:30 -0500
From: "Jerry Ford" <benlightnd13@mchsi.com>
To: "Pigs" <multipigplus@yahooogroups.com>, "qrp-l" <qrp-l@lehigh.edu>, "FPigs" <fpqrp-l@mpna.com>
Subject: [151275] Fw: [multipigplus] Multipig vs K-1
Message-ID: <007301c322ea\$302db7a0\$f374da0c@mchsi.com>

Paul: I don't know if anyone has answered this for you or not but figured I would jump in with my 2 cents.

I have both rigs (K-1 and MP +)
I've done some A / B tests with them and they are comparable in many ways. Both have advantages !!
The K-1 has portability due to it's size.
The K-1 has an internal tuner which is very convenient
(I can add this to my MP + but haven't yet)
The K-1 has an internal battery option
(so does the MP + if you wish to install it)
The K-1 has automated band switching
(will be available for the MP + soon)
The K-1 has RIT.
(will be available for the MP + soon)
The K-1 comes as a complete kit including enclosure, switches, knobs etc.
The MP + has all band coverage with extended band spread.
The MP + will run up to 16 watts out if you want to set it that way.
The MP + has a better signal to noise level
The MP + has a K-10 keypad with 4 memory slots and many more features available.
The MP + has a full scale freq readout (with backlighting)
The MP + can work split freq's
The MP + has a variable band pass rather than selectable filters which makes it much easier to knock QRM and enhance the signal you're trying to hear.
The MP + is designed as an experimenters rig and as such is not supplied with an enclosure, switches, knobs etc.
You decide how you want to build it and you assemble it to your own liking. See a couple of examples of this at

<http://www.fpqr.com/>

As for the type of construction, both rigs use plated thru hole PCB's for all boards.

The K-1 incorporates a stacking method to save space.
The MP + can be arranged in whatever method your creativity allows. If you call that the Ugly method then take that in consideration when you build it and don't make it Ugly. Hee Hee

I'm sure I could go on and on but I think this will give you enough to decide what's in your future.

Major considerations:

The K-1 is small and portable.
The MP + covers all the HF bands including 60 mtrs with an extended

band spread and has better RX characteristics.

72 / 73 and have fun with whatever you choose:

Jerry N0JRN

(a mod coming out to make this easier)

----- Original Message -----

From: "Paul V." <admin@cruisenews.net>

To: <multipigplus@yahoogroups.com>

Sent: Sunday, May 25, 2003 10:04 AM

Subject: [multipigplus] Multipig vs K-1

> Are these two rigs similar in performance? The Mpig is built ugly style and the K-1 is on a circuit board, right?

>

> I'm looking around for a multiband cq kit, and I'm new to both rigs. Can anyone explain the positives and negatives of these rigs?

>

> Thanks

>

> kc8wbk

>

>

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~~~>

>

> To unsubscribe from this group, send an email to:

> [multipigplus-unsubscribe@yahoogroups.com](mailto:multipigplus-unsubscribe@yahoogroups.com)

>

>

>

> Your use of Yahoo! Groups is subject to <http://docs.yahoo.com/info/terms/>

>

>

-----

Date: Sun, 25 May 2003 14:11:00 -0500



From: mjfitz@uswest.net  
To: qrp-1@Lehigh.EDU  
Subject: [151276] Endorsement--Re: FS Teflon wire \$15 shipped  
Message-ID: <3ED11544.EF04D67C@uswest.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Folks...

Jim, N2GO, has a real good deal if you need some hookup or light antenna wire. I got the 22 ga last time and it is NICE! If you have never used teflon-insulated wire before you are in for a treat...the teflon does not melt at all, and the silver-plated wire solders extremely well. Also, you can't even come close to the price anywhere else...it is usually quite expensive...far more than what Jim is asking. Get some...or just be sorry you didn't...

Mike N0MF

-----  
Date: Sun, 25 May 2003 14:09:41 -0500  
From: KD5NWA <KD5NWA@cbayona.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [151277] Re: Third Order Intercept  
Message-ID: <5.2.0.9.0.20030525135901.00a74568@127.0.0.1>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Does anyone know what the spacing of the input frequencies are when they claim +40 dbm  
IP3? If it is 20Khz then it's a marketing ploy, to be more meaningful the spread needs to be 1 to 5 KHz, which is more realistic of band conditions, and they need to specify if the preamp and attenuators are turned on/off. Many manufactures like to use the 20kHz spacing because it makes their numbers better, still +40 dbm is a nice number.

At 07:31 AM 5/25/2003, Karl F. Larsen wrote:

> The subject measurement called TOI for short, is a drawing that  
> shows when the amplitude of the intermod signals is exactly equal to the  
> desired signal. In my 1996 ARRL Handbook it is figure 17.7 and is in the  
> chapter Receivers, Transmitters, Transceivers and Projects.  
>

> The TOI uses the fact that you can measure the level of the  
>desired and intermod signals and that the desired signal raises with a  
>slope of 1 while the intermod signal raises with a slopw of 3.  
>  
> So the only actual measurement is the spectrum display made of  
>the test receivers audio output. Now it's well known how to do this  
>measurement but it's not easy to do.  
>  
> And the test receiver must be fed 2 equal signals seperated in  
>frequency by just a few hundred cycles.  
>  
>  
>  
> Why do this measurement? Because with a single number you can  
>tell how good a receiver will perform on a busy Ham band. Actual numbers  
>that have been measured by ARRL show the Yaesu FT-817 with TOI= about +5  
>DB is typical of all the small radios where size and cost are important.  
>Other similar radios are the Yaesu FT-897 and the Icom 706.  
>  
> Now the Yaesu FT-1000 is an expensive radio and TOI= about +20  
>DB and listening to this receiver is a pleasure. The bands are not as  
>crowded, and nearby strong stations are not a problem. Stations you can  
>just hear on a FT-817 are loud and clear on the FT-1000.  
>  
>  
> I wonder how the band will sound with the new Icom receiver that  
>has TOI= +40 DB? They must achieve this amazing number with Digital  
>Signal Processing. You can make a nearly perfect filter and amplifier  
>with DSP.  
>  
>  
>  
>--  
>  
> - Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Cecil  
KD5NWA

-----  
Date: Sun, 25 May 2003 14:17:45 -0500  
From: Glen Reid <k5fx@arrl.net>  
To: JamesDuffey@comcast.net,  
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [151278] Re: 10w into my +40 dbm IP3 receiver  
Message-ID: <5.2.0.9.0.20030525141659.028f2cd0@pop-server.austin.rr.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

RIGHT ON, DOCTOR!!

At 12:10 PM 5/25/2003, James R. Duffey wrote:

>I think that the efforts of most rig designers today  
>would be better put to use reducing the wide band noise introduced in the IF  
>and AF stages, as well as reducing the distortion introduced in the over  
>driven audio stages of many rigs.

gr

GLEN REID

k5fx@arrl.net

Austin, Texas

"The only difference between genius and stupidity is that...genius has its  
limits"

-----  
Date: Sun, 25 May 2003 12:54:46 -0700

From: "KXBill" <w7kxb@cox.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [151279] Re: Diz on 7044

Message-ID: <02ea01c322f7\$7dfb6600\$25ac6d44@ph.cox.net>

MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Is Diz still on the air? if so, where?

Cheers

KXBill

----- Original Message -----

From: "Garie Halstead" <khyberpass65@yahoo.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Sunday, May 25, 2003 09:24

Subject: Diz on 7044

Just worked W8DIZ operating from Wirt County WV today on the Little  
Kanawha River with an inverted vee. Good signal but only a couple of

counties from me. HI You might wanna say hello to him before he leaves.

72 //Gary -K8KFJ-

-----  
Do you Yahoo!?

The New Yahoo! Search - Faster. Easier. Bingo.

<http://search.yahoo.com>

-----  
Date: Sun, 25 May 2003 16:00:44 -0700

From: "Nick Kennedy" <nkennedy@tcainternet.com>

To: <KD5NWA@cbayona.com>,

"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [151280] Re: Third Order Intercept

Message-ID: <004a01c32311\$78dc3720\$04000000a@wa5bdu>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

----- Original Message -----

From: "KD5NWA" <KD5NWA@cbayona.com>

> Does anyone know what the spacing of the input frequencies are when they  
> claim +40 dbm  
> IP3? If it is 20Khz then it's a marketing ploy, to be more meaningful the  
> spread needs to be 1 to 5 KHz, which is more realistic of band conditions,

Well I don't know, Cecil. It seems like if the spacing is within the passband of any filtering that may exist prior to the mixer, then it would be a valid test. And 20 kHz would certainly meet that criterion.

With a modern receiver that doesn't have a tunable preselector, I'd expect that the BW of the front would be 500 kHz or so. So any pair of signals in there could cause you troubles, if the math is right to put a birdie (IP3 product) on your desired listening frequency.

72--Nick, WA5BDU

-----

Date: Sun, 25 May 2003 15:14:17 -0500  
From: "George, W5YR" <w5yr@att.net>  
To: <KD5NWA@cbayona.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [151281] Re: Third Order Intercept  
Message-ID: <019901c322fa\$38f710b0\$0401a8c0@PS>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Not really, Cecil.

ARRL routinely determines IP3 for receivers with 20 kHz and now 5 kHz spacing. While it may be more "meaningful" - especially if you want to compare the 7800 with the ORION - to measure at 1 kHz or 200 Hz, there is nothing wrong or ill-intentioned with quoting a figure that can be directly compared with every other receiver that ARRL has tested. The usual test conditions for the highest IP3 number is for all preamps and attenuators to be off, so that can be assumed.

I don't think that Icom is/was claiming +40 dBm at *any* spacing. By not specifying a spacing, they were implying the routine 20 kHz spacing. I know of no other amateur market receiver that can show +40 dBm IP3 at 20 kHz spacing.

It may well be that at 500 Hz spacing, the ORION will do better in this department, but I think it is a little strong to claim that Icom's claim is just "a marketing ploy."

Let's also keep in mind that neither the ORION nor the 7800 have been tested by an independent lab to verify any specs. Everything that we have been given is based upon the manufacturer's own tests. Ten Tec *claims* an IP3 in excess of 20 dBm for 1 kHz spacing, but that has yet to be verified. I have no reason to doubt their veracity but neither do I doubt Icom's claim - and for the same reasons.

Enough said! <:} If you want to go ahead with this topic, I suggest that we do it privately since it is sorta OT for QRP-L.

Hope you are doing OK . . .

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
Fairview, TX 30 mi NE of Dallas in Collin county EM13QE  
"In the 57th year and it just keeps getting better!"  
<mailto:w5yr@att.net>

----- Original Message -----

From: "KD5NWA" <KD5NWA@cbayona.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Sunday, May 25, 2003 2:09 PM

Subject: Re: Third Order Intercept

> Does anyone know what the spacing of the input frequencies are when they  
> claim +40 dbm  
> IP3? If it is 20Khz then it's a marketing ploy, to be more meaningful the  
> spread needs to be 1 to 5 KHz, which is more realistic of band conditions,  
> and they need to specify if the preamp and attenuators are turned on/off.  
> Many manufactures like to use the 20kHz spacing because it makes their  
> numbers better, still +40 dbm is a nice number.

-----  
Date: Sun, 25 May 2003 16:33:38 -0700

From: "Nick Kennedy" <nkennedy@tcainternet.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [151282] Re: Third Order Intercept

Message-ID: <005001c32316\$119adbc0\$0400000a@wa5bdu>

MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Like Dan Tayloe said, few of us ordinary hams understand this TOI stuff. I  
sure don't understand it to the level of Dan or Doc.

But most of us understand what harmonics are and we also understand how  
mixing works.

The 3rd order distortion product is the result of the mixing of one  
"fundamental" signal and another signal's second harmonic. These harmonics  
may be generated in the preamp or in the mixer itself.

So consider that you are listening on 14020 and there are strong signals on  
14040 and 14060. These signals are far enough away that, without this third  
order stuff, your sharp IF filter easily rejects them in the post-mixer

filter stage. But ... (cue ominous music) a second harmonic of the 14040 signal is generated at 28080. That mixes with the 14060 kHz signal, resulting in a 3rd order distortion product at 28080 minus 14060 or 14020. Right where you're listening! So you can see why this TOI stuff can be important.

There was an interesting discussion of \*second\* order products in Ulrich Rhode's three part series beginning in QST May, 1994. Second order products are the result of simple mixing of fundamentals. For example, SW BC signals on 6 and 8 MHz might be mixed and produce a 14 MHz signal--a birdie QRMing the 20 meter band. These things might be easy to filter out in the front end, but since no one measured this kind of distortion product before the article, manufacturers didn't bother to design for it. An example was that many rigs had built in ATUs that would have provided a high measure of rejection of out of band signals, but the design switched the ATU out of circuit in receive. There was no cost benefit in this; it was just carelessness.

As I think about it, I guess the mixing would have to occur ahead of the "real" mixer, and I believe that it did occur in the diodes used for T/R switching. Dr. Rohdes recommended some PIN diodes with much better characteristics in this area. I suppose it could also occur in an overloaded preamp.

Finally, on the subject of putting 10 watts into the receiver front end. I'm sure it would smoke most receivers, but it made me recall an on-line article (now gone) by 160 meter heavyweight W8JI. He said he had some 2N3866 preamps on his Beverages that would to to ?? watts (some integer) before clipping. Of course this guy is a fanatical contestor and not typical, but I thought it was interesting anyway.

There, that's all I know about shrimp. I mean mixing.

72--Nick, WA5BDU  
mixed up in Arkansas

-----  
Date: Sun, 25 May 2003 13:38:40 -0700  
From: <tlogan7@cox.net>  
To: <ic756pro2@yahooogroups.com>, "QRP-L" <qrp-l@Lehigh.EDU>  
Cc: "John Kuklewicz" <kukl@cybrquest.com>  
Subject: [151283] Very neat cw key site

Message-ID: <001901c322fd\$a03c9120\$c9e96a44@ph.cox.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi all -

This is a facinating site I discovered just now whicj may interest some of you.

<http://www.w1tp.com/mrm.htm>

The Marconi like key and story is great.  
73/Tim NZ7C

-----  
Date: Sun, 25 May 2003 15:41:36 -0500  
From: "Jerry Ford" <benlightnd13@mchsi.com>  
To: "qrp-1" <qrp-1@lehigh.edu>, "Pigs" <multipigplus@yahoogroups.com>, "FPigs" <fpqrp-1@mpna.com>  
Subject: [151284] Fw: [fpqrp] Fw: [multipigplus] Multipig vs K-1  
Message-ID: <003f01c322fe\$09ed73a0\$f374da0c@mchsi.com>

Bill: Thats a good question. And a well kept secret it seems!! So, I'll let the cat out of the bag for all to see. This is part of Diz's parts sales pages. For a google search use <http://partsandkits.com>

The actual page for the MP + is  
<http://partsandkits.com/multipig.asp>

Check it out and let us know what you think !!

72 oo Jerry N0JRN  
----- Original Message -----  
From: "KXBill" <w7kxb@cox.net>  
To: "Jerry Ford" <benlightnd13@mchsi.com>  
Sent: Sunday, May 25, 2003 3:04 PM  
Subject: Re: [fpqrp] Fw: [multipigplus] Multipig vs K-1

> Hello Jerry:

> Where does one find info on the MP+. ? Have done a search and all

> I come up with is pages on audio.

> Later

> Bill/w7kxb #543



> ----- Original Message -----  
> From: "Jerry Ford" <benlightnd13@mchsi.com>  
> To: "Pigs" <multipigplus@yahooogroups.com>; "qrp-l"  
<qrp-l@Lehigh.EDU>;  
> "FPigs" <fpqrp-l@mpna.com>  
> Sent: Sunday, May 25, 2003 11:19  
> Subject: [fpqrp] Fw: [multipigplus] Multipig vs K-1  
>  
>  
>  
>

-----  
Date: Sun, 25 May 2003 16:52:05 -0400  
From: Rick McKee <kc8aon@juno.com>  
To: qrp-l@Lehigh.EDU, fpqrp-l@mpna.com  
Subject: [151285] FS: Rockmite 40  
Message-ID: <20030525.165213.9014.0.kc8aon@juno.com>

For sale: RockMite 40, built and mounted in a real nice black plastic case similar to the ones used by the Ramsey kits and has 4 small rubber feet on the bottom. Case is 3.25" X 5.25" X 1.25", and rear panel is aluminum and has SO-239 for the antenna, a coaxial power connector, and a spare unused RCA connector. Front panel has power switch, keyer control button, paddle and phone jacks and is white plastic. Controls and jacks have been labeled using a Dymo label maker with black label tape and applied on the top of the case over their respective components. RockMite is in great working condition, just excess to my needs. This is a lightweight but rugged little rig that would work good on the backpack trail ! I also have with it a Whiterook model MK-44 minipaddle and 24" cable for the paddle and the manual for the rig.

Asking \$45 for all plus shipping from 45696 zip code.

72/73 de: Rick McKee, KC8AON <> Willow Wood, Ohio <> Grid: EM88rl  
SW 40+, HW-8, Yaesu FT-7, Homebrew 6V6 tube TX & Hallicrafters SW500 RX  
<> RockMite 40 <>  
QRP-L #2112, FPqrp #33, AR QRP #269  
QRP'ers DEPEND ON SKILL - NOT RAW POWER !

-----  
The best thing to hit the internet in years - Juno SpeedBand!  
Surf the web up to FIVE TIMES FASTER!  
Only \$14.95/ month - visit [www.juno.com](http://www.juno.com) to sign up today!

-----  
Date: Sun, 25 May 2003 15:09:23 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: qrp-l@lehigh.edu  
Subject: [151286] Silent Key KK5YY  
Message-ID: <Pine.LNX.4.44.0305251500340.11855-100000@bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I was shocked to hear that Jerry KK5YY passed away from a heart attack last friday. Jerry enjoyed QRP and made some real contributions to to the hobby. He was about to retire from the Las Alamos Labs and was just 60 years old.

--

- Karl Larsen k5di Las Cruces, NM Az ScQRPions -

-----  
Date: Sun, 25 May 2003 17:30:29 -0400  
From: "Bill, N4QA" <n4qa@hotmail.com>  
To: qrp-l@lehigh.edu  
Subject: [151287] Weekly Rock-Mite-RTTY W.A.S. progress report...  
Message-ID: <BAY1-F48Eh6Vave5qvK000016f2@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Well, it's kinda slow going but we ARE in double-figures territory now...

States worked so far on Rock-Mite-RTTY at ~14088 KHz from Pulaski County, Virginia:

Minnesota  
Nevada  
Texas  
Arkansas  
Indiana  
Florida  
New York  
Pennsylvania  
Alabama  
Louisiana

Only forty more to go!

This weekend has been especially fun...hearing/seeing lots of CW, packet and even a couple of PSK31 sigs near 'my' RM-RTTY freq during some sort of contest. Tried to make a CW Q or 2 but the fellows were just out of reach, freq wise...

My most recent RM-RTTY contact was with Jim, WB5AAA in Breaux Bridge, Louisiana and I was Jim's first RTTY contact...he was using a new FT-100 he'd bought at Dayton this year.

Once, I was even called by Pennsylvania immediately upon signing with Florida. I Felt like rare DX for a minute there :)

Check out my Rock-Mite-RTTY project at:  
<http://www.qsl.net/n4qa/rockrtty/rockrtty.html>

73.  
Bill, N4QA

---

The new MSN 8: smart spam protection and 2 months FREE\*  
<http://join.msn.com/?page=features/junkmail>

---

Date: Sun, 25 May 2003 17:39:19 -0400  
From: john <johnmb@nc.rr.com>  
To: QRP-L@lehigh.edu  
Subject: [151288] Anyone else QRP'n in the WPX test?  
Message-ID: <3.0.3.32.20030525173919.028d0364@pop-server.nc.rr.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Got my brand new SST20 on the air, and in 3 casual hours worked 55 stations in 19 countries while dabbling in the WPX contest.

Amazing little rig that fits in the palm of my hand...

John

---

Date: Sun, 25 May 2003 15:08:32 -0700 (PDT)  
From: Gary Slagel <gds slagel@yahoo.com>

To: QRP L <qrp-l@Lehigh.EDU>  
Subject: [151289] Re: N0SXX from Colorado Trail Sat Nite  
Message-ID: <20030525220832.81085.qmail@web11602.mail.yahoo.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Back from the trail. I appreciate the emails from the guys that took a listen for me! As a couple said.. 'too much contest!'.. too much from this side too. I'd forgotten about it. Had some nice qso's on 30 though and had a great time!

Thanks to anybody that listened. I'll do better next time.

73,Gary

=====  
Gary Slagel/N0SXX  
Conifer, CO 80433  
gdslagel@yahoo.com  
Personal Website: <http://gdslagel.bravepages.com>

-----  
Do you Yahoo!?  
The New Yahoo! Search - Faster. Easier. Bingo.  
<http://search.yahoo.com>

-----  
Date: Sun, 25 May 2003 17:13:18 -0500  
From: Wayne Rogers <w5kdj@juno.com>  
To: johnmb@nc.rr.com, qrp-l@lehigh.EDU, soc@mailman.qth.net, nars@mailman.qth.net  
Subject: [151290] Re: Anyone else QRP'n in the WPX test?  
Message-ID: <20030525.171318.-1652739.0.w5kdj@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I worked 80 QSO's in about 11 hours and came up with something like 13.8k points. Not to bad I guess for 500MW on 14/21/28mcs. This contest was work, but I also dropped my power by 3db this year.

Wayne\_W5KDJ  
ex: SV0WWW\_TF2WJN

ARS\_1392 ARCI\_11325 FISTS\_10060 SOC\_538

-----  
Date: Sun, 25 May 2003 16:29:09 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: qrp-l@lehigh.edu  
Subject: [151291] Data for understanding  
Message-ID: <Pine.LNX.4.44.0305251617020.1351-1000000@bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

If you want to make sense talking about the Third Order Intercept (TOI) or (IP3) numbers on receivers you need to get a couple of files from the ARRL web page that are available when you click on the QST Equipment Tests tab. Download testproc.pdf and ft817etr.pdf and these files will tell you how the TOI measurement is done and you can calculate it for the FT-817 from the data on that radio.

It sure has opened my eyes and right now I'm trying to find out how different Dan Taloe's method is compared to the ARRL method. I have a page of calculations and am now certain there is a difference that looks like  $-1.5(B) + 3$  and I see no way to bring the difference to zero unless  $-1.5(b) = 3$ . Small chance of that...:-)

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

-----  
Date: Sun, 25 May 2003 17:24:19 -0500  
From: "Jerry Ford" <benlightnd13@mchsi.com>  
To: "qrp-l" <qrp-l@lehigh.edu>, "FPigs" <fpqrp-l@mpna.com>  
Subject: [151292] Ok, I'm full and Ready to play  
Message-ID: <006b01c3230c\$62c89c80\$f374da0c@mchsi.com>

OK piggies: I've just come from the trough and I'm stuffed.  
I have just enough energy left to sit here and call CQ. So, I'm  
back on 30 mtrs with a fresh battery on the MP + and ready for a good  
ole ragchew. ( or maybe just a gool ole howdy )  
Anyone sittin around looken for a low impact way to work off your  
lunch / super ??  
Drop by and give me a shout ! 10.107

hope to see ya there: 72 Jerry N0JRN

FP # 546, ARS # 923, ARCI # 11049, ARRL,  
Springfield, Mo. <http://home.mchsi.com/~n0jrn/>  
MP + # 8, K 1 # 608, SW 20 +, TT 1340 , RM 20 &  
40, Tiny Tornado 20, 30, 40, 80, SMK - 1  
and so on and so on

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End of QRP-L Digest 2931

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